

## **Department of Energy**

## **Ohio Field Office** Fernaid Area Office

P. O. Box 538705 Cincinnati, Ohio 45253-8705 (513) 648-3155

DOE-0935-97

Mr. Tom J. Walsh, Manager **Environmental Compliance** Fluor Daniel Fernald, Inc. P.O. Box 538704 Cincinnati, OH 45253-8704

Dear Mr. Walsh:

APPROVED NATIONAL ENVIRONMENTAL PROTECTION ACT DOCUMENTATION **APRIL, 1997** 

The enclosed National Environmental Protection Act (NEPA) documents have been approved by Department of Energy, Ohio Field Office (DOE-OH). The proposed actions that were approved are:

CX 480	Department of Energy, Fernald Environmental Management
	Project (DOE-FEMP) Site Characterization and Environmental

Monitoring - Calendar Year 1997 and 1998

CX 481 Installation of Pre-Fabricated Structures,

Calendar Year 1997 and 1998

CX 482 **DOE-FEMP Routine Shipping Activities,** 

Calendar Year 1997 and 1998

CX 483 **DOE-FEMP Operation and Routine** 

Maintenance Projects, Calendar Year

1997 and 1998

**Disposition of Enriched Nuclear Material Inventory** Checklist

UE RAYER

If you have any questions regarding this matter, please contact Ed Skintik at 648-3151.

Sincerely,

**FEMP:Skintik** 

David R. Kozlowski Associate Director,

Office of Safety & Assessment

**Enclosures: As Stated** 

cc w/o encl:

M. Gareis, DOE-FEMP
J. Reising, DOE-FEMP

#### **ENVIRONMENTAL CHECKLIST**

Project/Activity Title: FEMP Site Characterization and Environmental Monitoring - CY1997 & 1998	NEPA IO Number: Rev. #: Date: CX-480
Contractor Project Manager: N/A	Phone: N/A
Contractor NEPA Coordinator: Tom Walsh	Phone: (513) 648-5275
DOE NEPA Document Manager: Ed Skintik	Phone: (513) 648-3151

## A. BRIEF PROJECT/ACTIVITY DESCRIPTION: (Attach detailed description or statement of work, if necessary)

The U.S. Department of Energy (DOE) at the Fernald Environmental Management Project (FEMP) proposes to conduct environmental monitoring activities including site characterization both on and off the FEMP property, which includes the FEMP property and areas off property that are within the scope of FEMP projects or have become contaminated.

The FEMP is a 1.050 acre facility located 18 miles northwest of downtown Cincinnati, Ohio. The proposed action will occur at various locations within the FEMP property boundary and at locations off property. Sampling locations on property will include the zones of influence for each of the five operable units. These operable units include: (1) Waste Pits 1 through 6, the Burn Pit, and the Clearweil: (2) Other Waste Units: (3) the former Production Area and associated suspect areas; (4) Silos 1, 2, 3, and 4; and (5) all environmental media. Sampling locations off property will be determined as required.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) require taking numerous samples from various types of environmental and material media on a periodic basis. Additionally, DOE Orders and other statutes and regulations require characterization and monitoring activities. Data collected both on and off property will be used to support decisions concerning remediation alternatives and waste handling techniques under both CERCLA, RCRA, and other federal and state requirements. This categorical exclusion (CX) is a revision of CX-464. Site Characterization and Environmental Monitoring, CY 1995 - 1996, and is being submitted for the period CY 1997 -1998, covering the duration of the Remedial Design/Remedial Action (RD/RA) documents, operation and maintenance activities, and a variety of certification/verification activities.

The proposed action will involve both on- and off-property environmental sampling including ambient air, hydrological, geological, meteorological, and archeological data collection. Samples collected on the FEMP property will involve taking approximately 20,000 samples annually including 1,500 air, 1,000 water, 500 soil, a variety of hazardous and non-hazardous waste. National Pollutant Discharge Elimination System (NPDES) discharges, and stack samples. Off-property sampling will include all the above mentioned media and will be collected as required.

Air samples will be taken from ambient air monitors and radon detectors at stations strategically located around the FEMP. Water samples will include grab samples from groundwater and surface water locations. (Water sampling activities will include performance aquifer flow response testing and the installation and abandonment of groundwater monitoring weils.) Soil sampling will include taking borehole and spade samples. Waste samples will be taken from drums, pits, and bulk tanks. The NPDES samples



will be taken from several monitoring points. In addition, numerous samples of flora and fauna will be taken annually from approximately 40 locations on and off the FEMP property. All sample shipments will be in accordance with applicable U.S. Department of Transportation requirements. The disposal of all samples and the sampling media will comply with regulatory requirements and FEMP procedures and protocois.

The Site-wide CERCLA Quality Assurance Project Plan (SCQ) outlines procedures for site characterization and environmental monitoring under RCRA and CERCLA at the FEMP and will be adhered to for all activities in the proposed action.

## B. SOURCES OF IMPACTS: Would the proposed action involve, generate, or result in changes to any of the following?

	YES NO	0		YES	NO
1. Air emissions	<u>x                                    </u>	12.	Water Use/Diversion	_	X
2. Liquid effluents	<u>x</u>	13.	Water Treatment	<u>X_</u>	
3. Solid waste	<u>X</u> _		Waterway modification	_	<b>X</b> _
4. Radioactive wastelsoil	<u>X</u> _	15.	Radiation/toxic chemical exposures	<u>X</u>	_
5. Hazardous waste	. <u>x</u> _	16.	Pesticide/herbicide use	<u>X</u>	_
6. Mixed waste	<u>X_</u> _	17.	High energy source/explosives	-	<u>X_</u>
7. Chemical storageruse	<u>X</u>	18.	Transportation	<u>X_</u>	_
8. Petroleum storageiuse	_ <u>x</u>	19.	Noise levels		X
9. Asbestos	<u>x</u> _	20.	Workforce adjustment	٠	<u>X</u> _
10. Utilities	<u>x</u>	21.	OTHER	_	<u>X_</u>
11. Clearing or excavation	<u> </u>	<del>_</del>	•	_	

## Explanation and Qualification of specific responses of "YES."

Vumber	Explanation
ALL_	All items checked "yes" could be involved through sampling efforts only. No significant quantities of waste would be generated.
11_	Small-scale clearing may be needed for installation of monitoring wells.

### D. RECOMMENDATION AND APPROVAL

Contractor NEPA Coordinator and OOE Area Office NEPA Document Manager's Determination: The potential environmental impacts of the proposed action are adequately addressed in:

		ng NEPA Documentation (approval to proceed with the pro ability Determination) OU3 Record of Decision approved o	
	Signature:	Contractor NEPA Coordinator	Date: <u>7/1/97</u>
/	Signature:	DOE Area Office NEPA Document Manager	Date: 4//7/97
Concu		Description meets the criteria specified by 10 CFR 1021. St	· · · · · · · · · · · · · · · · · · ·
	[ ] [ ] [ ] [ ]	Categorical Exclusion (Subpart D. Appendix B. Class Environmental Assessment (Subpart D. Appendix C. ( Environmental Impact Statement (Subpart D. Append Action Description Memorandum (action not listed in Variance (Emergency Action per 40 CFR 1506-1 1 an	Class of Action dix D, Class of Action n Subpart O.)
	Signature:	Smiley NEDA Compliance Officer	Date:

NOTE: DOE Order 45.1.1 entitled "National Environmental Policy Act Compliance Program" (dated September 11, 1995), paragraph 5.d.(2) delegates authority for categorical exclusion (CX) determinations and lesser determinations to the NEPA Compliance Officer. This authority heretofore resided with the Field Office Manager. Section D. "Recommendation and Approval", of the Ohio Field Office Environmental Checklist (ECL) has been modified accordingly to show that CX determination authority now resides at the NEPA Compliance Officer level (i.e., the signature of the Manager is no longer required). Revision 2 of the Ohio Field Office NEPA Compliance Standard Operating Procedure (OH-6.1.01) will reflect this change in authority for CX determinations, as well as other non-substantive changes required to ensure consistency with DOE Order 451.1. An issuance date for Revision 2 of OH-6.1.01 has yet to be established. Any questions regarding the Ohio Field Office NEPA Compliance Program should be directed to Ms. Sue Smiley, NEPA Compliance Officer at (513) 865-3987.

C.	CATEGORY EVALUATION CRITERIA: Would the proposed action:		
	·	YES	NO
1.	Be related to a proposed action with potentially significant impacts?	_	<u>X</u>
2.	Take place in an area of previously or ongoing disturbance?	$\frac{\overline{x}}{x}$	
3.	Create uncertain, unique or unknown risks?		$\overline{x}$
4.	Require any federal, state or local permits, approvals, etc.?	$\frac{\overline{x}}{x}$	
5.	Create hazardous, radioactive or mixed waste for which no disposal is available?	_	X
6.	Impact a RCRA-requiated unit or facility?	_	X
7.	Threaten or violate any statute, regulation or DOE Order?	_	X X X X X
8.	Disturb hazardous substances, pollutants or contaminants that pre-exist in the environment?	_	X
9.	Require siting, construction, or expansion of a waste treatment, storage or disposal facility?	_	$\overline{\mathbf{x}}$
10.	Adversely affect any environmentally sensitive resources including, but not limited to.	_	X
	structures of archaeological, historic or architectural significance; threatened or endangered		_
	species or their habitat; flood plains or wetlands; wildlife refuges, agricultural lands		
	or vital water sources (e.g., sole-source aquifer)?		
11.	Force a low-income or ethnic minority population to shoulder a disproportionate share of the	_	<u>X</u>
	negative environmental impacts of pollution or environmental hazards because of a lack of	_	
	political or economic strength (i.e., an issue of "Environmental Justice")?		
12.	(if the proposed action will involve air emissions, will the action) be located within an air	_	χ_
	pollutant non-attainment or maintenance area for any of the criteria pollutants? (if YES. then	_	
	additional analysis may be required to determine if emissions would be above de minimus		
	thresholds and/or if emissions would be regionally significant. Pending completion of this		
	analysis, requirements stated in 40 CFR 93.158 may be imposed before the proposed action		
	could proceed).		
	· <del>- 2</del>		
	Explanation and Qualification of specific responses of "YES."		•
Number	Explanation		
2_	Packaging will take place in process area		
4	Approvals for transportation will be required		
			<del></del>

B.	SOURCES OF IMPACTS:	Would the proposed action involve.	generate.	, or result in change	s to any of the following?
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	YES	NO			YES	NO
1. Air emissions	X		12.	Water UseiDiversion		<u>X_</u>
2. Liquid effluents	_	<u>X</u>	13.	Water Treatment		<u>X_</u>
3. Solid waste	_	<u>X_</u>	14.	Waterway modification	_	<u>X_</u>
4. Radioactive wastersoil	<u>X</u> _	_	15.	Radiation/toxic chemical exposures	<u>X_</u>	_
5. Hazardous waste	<del></del>	X	16.	Pesticide/herbicide use	_	X_
6. Mixed waste	-	X	17.	High energy source/explosives		X
7. Chemical storageiuse	~	$\overline{\mathbf{x}}$	18.	Transportation	X_	_
8. Petroleum storage/use	-	X	19.	Noise levels	_	$\overline{\mathbf{x}}$
9. Asbestos		X	20.	Workforce adjustment	_	$\overline{\mathbf{x}}$
10. Utilities	_	<u>X</u>	21.	OTHER	_	<u>X</u>
11 Clossing or execution		X				

## Explanation and Qualification of specific responses of "YES."

Number	Explanation
1	Small amounts of air emissions will result from packaging process: to be adressed by engineered controls
4	Radioactive material will be packaged and shipped off site
15	Potential exposure to the public through shipping
_18	Shipping material in ISO containers: for use in commercial reactors

#### **ENVIRONMENTAL CHECKLIST**

ProjecuActivity Title: Disposition of Enriched Nuclear Material Inventory	NEPA ID Number: Rev. #: Date:
Contractor Project Manager: Fran ito	Phone: 648-3739
Contractor NEPA Coordinator: Tom Walsh	Phone: 648-5275
DOE NEPA Document Manager:  Mary Beth Gareis  Ed Skintik	Phome: MBG: 648-3181 ES: 648-3151

#### A. BRIEF PROJECTIACTIVITY DESCRIPTION: (Attach detailed description or statement of work, if necessary)

Nuclear materials at Fernald site have historically been dispositioned from the site as part of ongoing CERCLA remedial actions, waste management activities and routine activities associated with facility operation. The majority of shipping activities at the site have focused on the disposition of waste off site for disposal. However, an inventory of slightly enriched and normal uranium products of approximately 1322 MTU that are stored on-site as a carry over from former production operations are available for off-site disposition. This material is in a variety of forms of product uranium materials with market value.

The proposed action involves the disposition of approximately 778 MTU of slightly enriched uranium compounds from the Fernald site, 225 MTU of uranium metal, 314 MTU of enriched compounds to be blended to vendor specifications, and an additional 5 MTU of normal compounds. The packaging of these materials would include setting up a T-hopper repackaging station, a blending station for isotopic blending, and routine packaging of metal and less than one percent U-235 compounds in shipping containers.

A Request for Proposal to identify a buyer for the slightly enriched and normal material was issued by DOE on May 13, 1996. Subsequently, an overseas buyer has been identified and a contract is being awarded for the sale of the material. Upon purchase being finalized, the material will be shipped to destination specified by the buyer. Shipment of the material will require approximately 125 truckloads leaving the Fernald site, after the on-site packaging of the material into International Standard Organization (ISO) containers is complete. It is expected that the disposition of the first shipment of the material would begin 90 days from date of contract, and every 60 days afterwards until completion of shipment. Furthermore, DOE has determined that this action will present no economic impact to domestic mining industries.

Disposition of the nuclear material inventory is fully integrated within CERCLA Remedial Activities under the Operational Unit 3 Record of Decision. Pursuant to the DOE Secretarial Policy regarding NEPA, Fluor Daniel Fernald recommends that the disposition of the material be excluded from further NEPA review. To document this finding, this ECL has been prepared pursuant to the DOE-Ohio Field Office Standard Operating Procedure (OH-6.1.01).

C.	CATEGORY EVALUATION CRITERIA: Would the proposed action:		
		YES	NO
1,	Be related to a proposed action with potentially significant impacts?	_	X.
2.	Take place in an area of previously or ongoing disturbance?	<u>X</u>	
3.	Create uncertain, unique or unknown risks?		<u>x</u> _
4.	Require any federal, state or local permits, approvals, etc.?	X	
5.	Create hazardous, radioactive or mixed waste for which no disposal is available?	_	<u>x</u>
6.	Impact a RCRA-regulated unit or facility?	_	X
7	Threaten or violate any statute, regulation or DOE Order?	_	X
8.	Disturb hazardous substances, pollutants or contaminants that pre-exist in the environment?	X	
9.	Require siting, construction, or expansion of a waste treatment, storage or disposal facility?	_	X
10.	Adversely affect any environmentally sensitive resources including, but not limited to,	_	<u>X</u>
	structures of archaeological, historic or architectural significance; threatened or endangered species or their habitat; floodplains or wetlands; wildlife refuges, agricultural lands or vital water sources (e.g., sole-source aquifer)?		
11.	Force a low-income or ethnic minority population to shoulder a disproportionate share of the negative environmental impacts of pollution or environmental hazards because of a lack of political or economic strength (i.e., an issue of "Environmental Justice")?	-	X
12.	(if the proposed action will involve air emissions, will the action) be located within an air pollutant non-attainment or maintenance area for any of the criteria pollutants? (if YES, then additional analysis may be required to determine if emissions would be above de minimus thresholds and/or if emissions would be regionally significant. Pending completion of this analysis, requirements stated in 40 CFR 93.158 may be imposed before the proposed action could proceed).	-	<u>X</u>
	Explanation and Qualification of spacific responses of "YES."		
Number	Explanation		
2_	Samples may be collected within any area, disturbed or undisturbed	·	
4_	Any permitting requirements would be secured prior to the installation of monitoring inst CERCLA-related sampling will meet the substrantive requirements of any permit.	ruments, etc.	
8_	By its nature, sampling could cause minimal disturbances to contaminated media.		

### D. RECOMMENDATION AND APPROVAL

The proposed action meets the criteria specified by 10 CFR. Subpart D. and/or DOE Policy and Guidance for:

{X <b>1</b>	Categorical Exclusion (Subpart D. Appendix B. Class of Action 83.1)
[]	Environmental Assessment (Subpart D. Appendix C. Class of Action
[]	Environmental Impact Statement (Subpart D. Appendix D. Class of Action
[]	Action Description Memorandum (action not listed in Subpart D.)
[ ]	Variance (Emergency Action per 40 CER 1506 11 and 10 CER 1021.343)

Signature: Date: 4/22/97

Sue Smiley, NEPA Compliance Officer

NOTE: DOE Order 45.1.1 entitled "National Environmental Policy Act Compliance Program" (dated September 11, 1995), paragraph 5.d.(2) delegates authority for categorical exclusion (CX) determinations to the NEPA Compliance Officer. This authority heretofore resided with the Field Office Manager. Section D. "Recommendation and Approvai". of the Ohio Field Office Environmental Checklist (ECL) has been modified accordingly to show that CX determination authority now resides at the NEPA Compliance Officer level (i.e., the signature of the Manager is no longer required). Revision 2 of the Ohio Field Office NEPA Compliance standard operation procedure (OH-6.1.01) will reflect this change in authority for CX determinations, as well as other non-substantive changes required to ensure consistency with ODE Order 451.1. An issuance date for Revision 2 of OH-6.1.01 has yet to be established. Any questions regarding the Ohio Field Office NEPA Compliance Program should be directed to Ms. Sue Smiley, NEPA Compliance Officer at (513) 865-3987.

#### **ENVIRONMENTAL CHECKLIST**

ProjectActivity Title: Installation of Pre-fabricated Structures, CY1997 - 1998	NEPA ID Number: Rov. #: Date:  CX - 481
Contractor Project Manager:	Phone: N/A
Contractor MEPA Coordinator: Tom Walsh	Phone: (513) 648-5275
DOE NEPA Document Manager:  Ed Skintik	Phone: (513) 648-3151

### A. BRIEF PROJECT/ACTIVITY DESCRIPTION: (Attach detailed description or statement of work, if necessary)

The United States Department of Energy (DOE) proposes to install trailers and other prefabricated structures to be used as offices, monitoring stations, guard shacks, storage, or for a similar purpose. The proposed Categorical Exclusion will support the procurement, placement, and utility installation of trailers and similar prefabricated structures needed on a case by case basis throughout CY 1997-1998.

Most structures will be installed within or adjacent to boundaries of the 136 acres (55 hectares (ha)) of the former Production Area near the center of the Fernald Environmental Management Project (FEMP). Installation locations will include pregisturbed areas were utilities, and roads are readily available. The FEMP property occupies 1,050 acres (425 ha) and is located approximately 18 miles northwest of downtown Cincinnati, Ohio.

As the FEMP begins to transition into the Remedial Design/Remedial Action phase of clean-up, the need for prefabricated trailers or similar structures for office space, storage, guard shacks, and monitoring stations will change frequently; consequently, the need for these structures will be managed on a case by case basis. The scope of the activities is limited to areas that have previously been prepared for the placement of structures and where utilities (i.e. water, electric, sewer) are available.

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Locations will not include any areas containing potential cultural resources, wetlands, floodplains, or other natural resource issues. Disturbance will be limited to 1 acre per project. Prefabricated structures will not be used for waste treatment, waste storage, or disposal. Waste generated from construction activities will be managed appropriately depending on the location of the structure installation.



B. S	SOURCES OF IMPACTS: '	Would the	e propose	a action i	nvoive, generate, or result in changes to any	of the following	ng?
		YES	ល០		-	YES	NO
1. A	Air emissions	<u>x</u>	_	12.	Water UserDiversion	_	X_
2. L	Liquid effluents	<u>X</u>		13.	Water Treatment	<u>x_</u>	
	Solid waste	<u>X</u>	_	14.	Waterway modification		<u>x</u> _
	Radioactive waste/soil	<u>x</u>	_	15.	Radiation/toxic chemical exposures	_	<u>X</u>
5. i	Hazardous waste	<u>X</u> X X X	_	16.	Pesticide/herbicide use	<u>X</u> _	
6. 1	Mixed waste	<u>X</u>	_	17.	High energy source/explosives		<u>X</u>
7. (	Chemical storage/use	_	<u>X</u>		Transportation	_	<u>X</u>
8. 1	Petroleum storageiuse	_	<u>X</u>		Noise levels		X X X X
	Asbestos	_	<u>X</u> _		Workforce adjustment	~	X
10.	Utilities	<u>X</u>	_	21.	OTHER	-	<u>X</u>
11.	Clearing or excavation	<u>X_</u>	-				
	ı	Explanat	ion and (	Qualifica	tion of specific responses of "YES."		
Number				i	Explanation		
1-2-13	Small changes in air emr	nissions	and/or li	iquid effi	uent could occur. However, due to the na	ture of pre-f	abricated
	structures (small size, lin	nited us	e. etc.). a	ny impa	ets would be minor.	-t. 1. 2 ·	
3.6	Small quantities of wast would be small.	te could l	ne gener	ated dur	ing construction, but because of size, etc,	, amounts ge	nerated
<u>10-11</u>	Minor impacts would be	expecte	d during	constru	ction, because of size, etc.		
16	Small quantities of herb	icides/pe	sticides	may be	used for weed control and pest control.		
C.	CATEGORY EVALUATION	N CRITEI	RIA: Woi	ald the nr	onosed action:		
u.				p.		YES	NO
1.	Be related to a proposed a	ction wit	h potenti	ally signif	icant impacts?	_	<b>X</b> .
2.	Take place in an area of p					<u>X</u>	-
3.	Create uncertain, unique o					_	<u>x</u>
4.	Require any federal, state					X	-
5.				te for wh	ich no disposal is available?	_	<u>X</u>
6.	Impact a RCRA-regulated					_	X X X
7.	Threaten or violate any st		-			-	X.
8.					nants that pre-exist in the environment?	<u>X</u>	_
9.	•				treatment, storage or disposal facility?	-	÷
10.	•				rces including, but not limited to, significance; threatened or endangered	_	4
					life refuges, agricultural lands		
	or vital water sources le.				iiie ieruyes, ayricuituidi lallus		
11.					shoulder a disproportionate share of the		<u>X</u> _
11.					inmental hazards because of a lack of	_	
	political or economic stre						
12.	,	-			the action) be located within an air	_	<u>X</u>
r ta+					y of the criteria pollutants? (if YES, then	_	
					missions would be above <i>de minimus</i>		

thresholds and/or if emissions would be regionally significant. Pending completion of this analysis, requirements stated in 40 CFR 93.158 may be imposed before the proposed action could proceed).

Explanation and Qualification of specific responses of "YES."

Evolunation

Number		Explanation
2	Pre-fabricated st	ructures will be used in developed areas.
4_	Standard constru	uction-related permits may be required, depending on the location, etc.
8	Contaminated so	il may be disturbed as a result of construction.
D.	RECOMMENDAT	ION AND APPROVAL
	The proposed ac	tion meets the criteria specified by 10 CFR, Subpart O. and/or DOE Policy and Guidance for
	[X] [ ]	Categorical Exclusion (Subpart O. Appendix B. Class of Action <u>81.15</u> , <u>81.22</u> ) Environmental Assessment (Subpart O. Appendix C. Class of Action)
	[]	Environmental Impact Statement (Subpart D, Appendix D, Class of Action) Action Description Memorandum (action not listed in Subpart D.)
	[ ]	Variance (Emergency Action per 40 CFR 1506-11 and 10 CFR 1021.343)
	Signature: Sua S	miley, NEPA Comptiance Officer Date: 4/22/91

NOTE: DOE Order 45.1.1 entitled "National Environmental Policy Act Compliance Program" (dated September 11, 1995), paragraph 5.d.(2) delegates authority for categorical exclusion (CX) determinations to the NEPA Compliance Officer. This authority heretofore resided with the Field Office Manager. Section D. "Recommendation and Approval", of the Ohio Field Office Environmental Checklist (ECL) has been modified accordingly to show that CX determination authority now resides at the NEPA Compliance Officer level (i.e., the signature of the Manager is no longer required). Revision 2 of the Ohio Field Office NEPA Compliance standard operation procedure (OH-6.1.01) will reflect this change in authority for CX determinations, as well as other non-substantive changes required to ensure consistency with DOE Order 451.1. An issuance date for Revision 2 of OH-6.1.01 has yet to be established. Any questions regarding the Ohio Field Office NEPA Compliance Program should be directed to Ms. Sue Smiley, NEPA Compliance Officer at (513) 865-3987.

#### **ENVIRONMENTAL CHECKLIST**

Project Activity Title: FEMP Routine Shipping Activities, CY1997 & 1998	NEPA IO Number: Rev. #: Date: CX482
Contractor Project Manager: N/A	Phone: N/A
Contractor NEPA Coordinator: Tom Walsh	Phone: (513) 648-5275
DOE NEPA Document Manager:  Ed Skintik	Phone: (513) 648-3151

### A. BRIEF PROJECT/ACTIVITY DESCRIPTION: (Attach detailed description or statement of work, if necessary)

The United States Department of Energy (DOE) proposes to conduct shipping of equipment, supplies, waste, and recyclable materials to and from the Fernald Environmental Management Project (FEMP) as part of facility operation and routine maintenance activities.

The proposed action will occur at various regional locations, including the FEMP site. The 1050 acre FEMP site is located in a rural area of southwest Ohio, within Butler and Hamilton Counties, approximately 18 miles northwest of downtown Cincinnati, Ohio.

Buildings, structures, infrastructures, equipment, and offices must be kept in a suitable condition in order to accomplish the FEMP mission of the safe environmental restoration and compliance. Facility operation and routine maintenance activities at the FEMP are required to maintain and preserve these structures, equipment, and working conditions. Also, new, non-contaminated equipment must be shipped from the FEMP site as part of the Safe Shutdown Program (Removai Action No. 12). This NEPA documentation applies specifically to shipping activities associated with routine plant operation and maintenance activities and the clean equipment as part of the Safe Shutdown Program. Radiological waste or product inventory shipped under Site Response Actions is not covered by this categorical exclusion.

The proposed action will involve a variety of shipments supporting facility operation and routine maintenance activities to and from various local, regional and nationwide locations. Many different kinds of equipment and supplies are required to preserve the appearance, working conditions, and sanitation of the FEMP. Common items that are shipped to the FEMP as part of facility operation and routine maintenance activities include equipment and materials associated with the maintenance, repair or replacement of the following:

- Process equipment and associated systems
- Utility systems, including water, electrical, communication, and data processing systems
  - Small-scale structures or buildings
- Safety hazard and prevention equipment, devices, and structures
  - Security systems
- Heating, ventilation, and air conditioning systems and high efficiency particulate air filters
- Materials, equipment, and structures associated with routine plant service activities, such as landscaping, snow removal, furniture assembly, infrastructure repair, vehicle and heavy equipment repair, and janitorial and housekeeping activities.



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In addition to the above shipping activities, routine non-contaminated waste disposal activities are required as part of facility operations. Office trash generated on the administrative side of the FEMP, as well as clean, non-contaminated process-side office trash is shipped to a local landfill. Eleven dumpsters are emptied daily and shipped by the landfill owner. This represents approximately 13,100 cubic meters of office trash shipped per year.

R	SOURCES OF IMPACTS:	Would the proposed action involve.	generate, or result in chang	es to any of the following?
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	YES	NO			YES	NO
1. Air emissions	-	<u>X</u>	12.	Water Use/Diversion	_	<u>X</u> _
2. Liquid effluents	_	<u>X_</u>	13.	Water Treatment	_	<u>x</u>
3. Solid waste	<u>X_</u>	_	14.	Waterway modification	_	<u>X</u>
4. Radioactive waste/soil	<u>X_</u>		<b>15.</b>	Radiation/toxic chemical exposures	_	<u>X</u>
5. Hazardous waste	<u>X_</u>	_	16.	Pesticide/herbicide use	_	<u>X_</u>
6. Mixed waste	<u>X</u>		17.	High energy source/explosives	_	<u>X</u>
7. Chemical storage/use	_	<u>X</u>	18.	Transportation	<u>X</u>	<u>X</u>
8. Petroleum storageruse	_	<u> X</u>	19.	Noise levels	_	<u> X</u>
9. Asbestos	_	X	20.	Workforce adjustment	_	` <u>X</u>
10. Utilities	_	X	21.	OTHER	_	<u>X</u>
11 Clearing or excavation	_	X				

Explanation and Qualification of specific responses of "YES."

Yumber	Explanation
3, 4, 5, 6, 18	Project involves the routine shipping of materials and non-hazardous, hazardous, radioactive.
or mix	ed waste.



C.	CATEGORY EVALUATION CRITERIA: Would the proposed action:		
		YES	NO
1.	Be related to a proposed action with potentially significant impacts?	_	<u>X</u>
2.	Take place in an area of previously or ongoing disturbance?	X	
3.	Create uncertain, unique or unknown risks?	_	X X X X X X
4.	Require any federal, state or local permits, approvals, etc.?	_	X
5.	Create hazardous, radioactive or mixed waste for which no disposal is available?	_	X
6.	Impact a RCRA-regulated unit or facility?	_	$\overline{\mathbf{x}}$
7.	Threaten or violate any statute, regulation or OOE Order?	_	X
8.	Disturb hazardous substances, pollutants or contaminants that pre-exist in the environment?	_	X
9.	Require siting, construction, or expansion of a waste treatment, storage or disposal facility?	_	X
10.	Adversely affect any environmentally sensitive resources including, but not limited to.	-	X
	structures of archaeological, historic or architectural significance; threatened or endangered	_	
	species or their habitat; floodplains or wetlands; wildlife refuges, agricultural lands		
	or vital water sources (e.g., sole-source aquifer)?		
11.	Force a low-income or ethnic minority population to shoulder a disproportionate share of the		X
	negative environmental impacts of pollution or environmental hazards because of a lack of	_	
	political or economic strength (i.e., an issue of "Environmental Justice")?		
12.	(if the proposed action will involve air emissions, will the action) be located within an air		<u> </u>
	pollutant non-attainment or maintenance area for any of the criteria pollutants? (if YES, then	-	
	additional analysis may be required to determine if emissions would be above de minimus		
	thresholds and/or if emissions would be regionally significant. Pending completion of this		4
	analysis, requirements stated in 40 CFR 93.158 may be imposed before the proposed action		
	could proceed).		
	Court process).		
	Explanation and Qualification of specific responses of "YES."		
	explanation and doanneation of specific responses of 125.		
Number	Explanation		
2	Shigments to and from the FEMP are primarily originated from developed areas.		

### D. RECOMMENDATION AND APPROVAL

The proposed action meets the criteria specified by 10 CFR, Subpart D. and/or DOE Policy and Guidance for:

(X)	Categorical Exclusion (Subpart D. Appendix B. Class of Action <u>B1.3</u>
[]	Environmental Assessment (Subpart D. Appendix C. Class of Action
	Environmental Impact Statement (Subpart O. Appendix O. Class of Action
[]	Action Description Memorandum (action not listed in Subpart D.)
[ ]	Variance (Emergency Action per 40 CFR 1506.11 and 10 CFR 1021.343)

Signature: Sue Smiley, NEPA Compliance Officer

Date: 4/22/97

NOTE: DOE Order 45.1.1 entitled "National Environmental Policy Act Compliance Program" (dated September 11, 1995), paragraph 5.d.(2) delegates authority for categorical exclusion (CX) determinations to the NEPA Compliance Officer. This authority heretofore resided with the Field Office Manager. Section D. "Recommendation and Approval", of the Ohio Field Office Environmental Checklist (ECL) has been modified accordingly to show that CX determination authority now resides at the NEPA Compliance Officer level (i.e., the signature of the Manager is no longer required). Revision 2 of the Ohio Field Office NEPA Compliance standard operation procedure (OH-6.1.01) will reflect this change in authority for CX determinations, as well as other non-substantive changes required to ensure consistency with DOE Order 451.1. An issuance date for Revision 2 of OH-6.1.01 has yet to be established. Any questions regarding the Ohio Field Office NEPA Compliance Program should be directed to Ms. Sue Smiley, NEPA Compliance Officer at (513) 865-3987.

#### **ENVIRONMENTAL CHECKLIST**

ProjectActivity Fitle: FEMP Operation and Routine Maintenance Projects. Cy 1997 and 1998	NEPA ID Number: Rev. #: Date: CX483
Contractor Project Manager:	Phone: N/A
Contractor NEPA Coordinator: Tom Walsh	Phone: (513) 648-5275
DDE NEPA Document Manager:  Ed Skintik	Phone: (513) 648-3151

## A. BRIEF PROJECT/ACTIVITY DESCRIPTION: (Attach detailed description or statement of work, if necessary)

At the FEMP, facility operation and routine maintenance activities that are corrective, preventative, and predictive are required to maintain and preserve building, structures, infrastructures, and equipment in a condition suitable for its designated purpose. These activities are therefore vital to accomplishing the FEMP mission of cleanup and environmental restoration. This CX is an update to NEPA Document No. 475 "FEMP Operation and Routine Maintenance Projects - CY 1996", and will be updated on an annual basis. The proposed actions will involve a variety of operating and routine maintenance actiavities for a period of one year. These activities may include the following actions:

- Training exercises and simulations.
- 2. Maintenance, repair, or direct replacement of in-kind process equipment and associated systems which include, but are not limited to:
  - Fans and tanks A.
  - B. Machine shop equipment
  - C. Heat exchangers
  - วาคหาย ขอดอดเลยสมัยสา จลัย เมื่อเปรา จามเวลา เกิดปลาสมาชิก 0. Ovens and furnaces
  - E. Bag houses and scrubbers
  - Conveyers F.
  - Motors G.
  - **Piping** H.
  - I. Valves
  - J. Compressors
  - K. Pumps
  - Inspection equipment
  - M. Motor control center
  - Maintenance and repair of utility systems including water, electrical, communication, and data processing systems.
    - A. Maintenance and repair of plant water systems including:
      - 1) Cooling water systems
      - 2) Potable water systems



- 3) Storm sewers and plant drainage
- 4) Plumbing (e.g., valves, piping)
- 5) Waste water treatment
- 8. Maintenance, repair, or direct replacement of plant and building electrical systems including:
  - 11 Switchvaros
  - 2) Building conquit, wiring, and lighting
  - 3) Emergency lighting
  - 4) Circuit and wiring maintenance
  - 5) Transformers, utility poles, crossarms, insulators, and downed transmission lines
- C. Maintenance, repair, or direct replacement of communications and computer systems including:
  - 1) Public address system
  - 2) Vax. FAX. computer. and peripheral systems
  - 3) Telephone systems
  - 4) Emergency warning
- 4. Routine plant service activities, including but not limited to:
  - A. Mowing, minor clearing and trimming of grass, shrubs, and trees
  - B. Assembling, uncrating, and moving furniture and equipment
  - C. Activities involving snow removal
  - D. Routine revegetation and erosion control activities
  - E. Janitorial and housekeeping activities
  - F. Small-scale use of pesticides
  - G. Small-scale road, sidewalk, and parking lot repair and upgrade
  - H. Maintenance and repair of plant vehicles and heavy equipment
  - 1. Maintenance of plant safesivaults and locks
  - J. Busing and plant transportation
  - K. Maintenance or repair of industrial machinery
  - L. Maintenance, repair, replacement, or installation of fencing
  - M. Fabrication and installation of indoor and outdoor signs
  - N. Construction of scaffolding
  - O. Railroad repairs
  - P. Calibration, testing, repair, and maintenance of instrumentation and electronic equipment
  - Q. Routine decontamination of tools, surfaces, and equipment where the action is not part of a decommissioning project
- 5. Maintenance of waste treatment, storage, and disposal facilities:
  - A. Minor spill cleanup activities
  - B. Maintenance or repair of liquid retention tanks, dikes, and piping
  - C. Maintenance or repair of lagoons and small basins
- 6. Maintenance, repair, or direct replacement associated with structures or buildings including:
  - A. Painting
  - B. Siding
  - C. Roofing
  - D. Mounting and hanging wail items
  - E. Door, ceiling, wall, window, floor, floor covering repairtreplacement
  - F. Cabinet and shelf fabrication and installation

# ATTACHMENT A (cont'd) CATEGORICAL EXCLUSION NO. 475

- G. Elevator repair
- H. Preventative and corrective actions required to maintain and preserve buildings, structures, and equipment in a condition suitable for fulfillment of its designated purpose (e.g., structural integrity tests)
- 7. Maintenance required for safety and hazard prevention including:
  - A. Fabrication, installation, and repair of safety railings, machine guards, hand rails, guard rails, frames, and fences
  - B. Installation of nonskid surfaces and anchoring floor mats
  - C. Grounding of structures and equipment
  - D. Maintenance, repair, or replacement of eye washes, safety showers, and radiation monitoring devices
  - E. Replacement of panic devices
- 8. Maintenance and repair of security systems including:
  - A. Computer security
  - B. Detection, monitoring, surveillance, and alarm systems
- 9. Maintenance, repair, or replacement of heating, ventilation, and air conditioning systems and high efficiency particle air filters.
- B. SOURCES OF IMPACTS: Would the proposed action involve, generate, or result in changes to any of the following?

1. Air emissions	YES X_	NO	12.	Water Use/Diversion	YES X	NO —
Liquid effluents     Solid waste	<u>X</u>	_	13. 14.	Water Treatment Waterway modification	<u>x</u>	- x
4. Radioactive waste/soil 5. Hazardous waste 6. Mixed waste		<u>X</u>	15. 16.	Radiation/toxic chemical exposures Pesticide/herbicide use		X 
<ol> <li>7. Chemical storage/use</li> <li>8. Petroleum storage/use</li> <li>9. Asbestos</li> </ol>	. 🗓	<u>X</u> <u>X</u>	18.	_High energy source/explosives । । । । Transportation Noise levels Workforce adjustment	X X —	- X
10. Utilities 11. Clearing or excavation	<u>X</u>	<u>x</u>	21.	OTHER	-	X

Explanation and Qualification of specific responses of "YES."

Number

Explanation

1, 2, 3, 8, 10, 12, 13, 16, 18, 19

This CX covers facility operation and routine maintenance, and therefore covers a variety of maintenance, repair and direct replacement acativities, including but not limited to: equipment: utility systems; plant service activities; waste treatment, storage and disposal facilities; security systems and heating, ventilation, and air conditioning systems.



# ATTACHMENT A (cont'd) CATEGORICAL EXCLUSION NO. 475

C.	CATEGORY EVALUATION CRITERIA: Would the proposed action:		
		YES	N
١.	Be related to a proposed action with potentially significant impacts?	_	X
2.	Take place in an area of previously or ongoing disturbance?	<u>X</u>	
3.	Create uncertain, unique or unknown risks?		$\overline{\mathbf{x}}$
4.	Require any federal, state or local permits, approvais, etc.?	<u>x</u> .	
5.	Create hazardous, radioactive or mixed waste for which no disposal is available?	_	X X X X X X
6.	Impact a RCRA-regulated unit or facility?	_	X
7.	Threaten or violate any statute, regulation or OOE Order?	_	Х
8.	Disturb hazardous substances, pollutants or contaminants that pre-exist in the environment?	_	X
9.	Require siting, construction, or expansion of a waste treatment, storage or disposal facility?	_	X
10.	Adversely affect any environmentally sensitive resources including, but not limited to,	_	X
•	structures of archaeological, historic or architectural significance; threatened or endangered species or their habitat; floodolains or wetlands; wildlife refuges, agricultural lands or vital water sources (e.g., sole-source aquifer)?	_	
11.	Force a low-income or ethnic minority population to shoulder a disproportionate share of the negative environmental impacts of pollution or environmental hazards because of a lack of political or economic strength (i.e., an issue of "Environmental Justice")?	-	, <b>X</b>
12.	(if the proposed action will involve air emissions, will the action) be located within an air pollutant non-attainment or maintenance area for any of the criteria pollutants? (if YES, then additional analysis may be required to determine if emissions would be above de minimus thresholds and/or if emissions would be regionally significant. Pending completion of this analysis, requirements stated in 40 CFR 93.158 may be imposed before the proposed action could proceed).	-	X
	Explanation and Qualification of specific responses of "YES."		
Number	Explanation		
2_	Much of the FEMP property is "disturbed" from previous activities.		
4	It is possible that a particular operation or routine maintenance activity may require a perr would be obtained.	nit. Such a c	<u>iermi</u>

# ATTACHMENT A (cont'd) CATEGORICAL EXCLUSION NO. 475

#### D. RECOMMENDATION AND APPROVAL

The proposed action meets the criteria specified by 10 CFR, Subpart D, and/or OOE Policy and Guidance for:

Categorical Exclusion (Subpart D. Appendix B. Class of Action <u>B1.3</u> )
Environmental Assessment (Subpart O, Appendix C, Class of Action
Environmental Impact Statement (Subpart D, Appendix D, Class of Action)
Action Description Memorandum (action not listed in Subpart D.)
Variance (Emergency Action per 40 CFR 1506.11 and 10 CFR 1021.343)

Signature: Discussion - Smiley Date: 4/22/97
Sue Smiley, NEPA Compliance Officer

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